

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-26 (Canceled).

Claim 27 (New): A method for producing a threaded tubular connection including a male tubular element comprising a tapered male thread, a female tubular element comprising a tapered female thread that cooperates with the male thread, and a deformable sealing ring interposed between the male and female elements to oppose fluid communication between the outside of the threaded tubular connection and a zone of cooperation of the threads, the method comprising:

placing the sealing ring around the male element beyond its thread with respect to its free end, the sealing ring comprising a body and a retaining lip with a radial thickness that is less than that of the body, extending axially towards the thread from a shoulder defining the body and having a thinned zone in a vicinity of the body, the thinned zone being in contact with an annular rib provided as a radial projection on the male element; and

engaging the free end of the male element in the female element and the male thread into the female thread, the sealing ring being progressively introduced into a first annular housing provided in the female element in a form of an enlargement of its axial boring extending axially from its free end to a shoulder and having a peripheral surface adjacent to the shoulder that cooperates over at least a portion of its axial length with the radially outer surface of the sealing ring to radially compress the sealing ring and establish a sealed contact between (1) the radially outer and inner surfaces of the sealing ring, and (2) the peripheral surface of the first housing of the female element and the facing surface of the male element, the body then being pushed along the male element by the shoulder of the first housing of the female element, after mutual abutment of the two shoulders, and the annular rib of the male

element coming into contact with the retaining lip at the end of makeup beyond the thinned zone, to cause the retaining lip to penetrate into a second annular housing formed in the female element at an axial distance from the first housing to ensure axial retention of the sealing ring by the female element.

Claim 28 (New): A method according to claim 27, wherein the sealing ring is formed from a material selected from synthetic materials, malleable metals, and composite materials.

Claim 29 (New): A method according to claim 27, wherein the sealing ring is formed from a material with a low coefficient of friction with the material from the male element.

Claim 30 (New): A method according to claim 27, wherein the sealing ring is formed from filled or un-filled polytetrafluoroethylene.

Claim 31 (New): A method according to claim 27, wherein at the end of makeup, the annular rib of the male element brings the retaining lip into contact with a flank of the second annular housing of the female element disposed on the side of the shoulder of the first housing.

Claim 32 (New): A method according to claim 27, wherein opposite the free end of the male element, the male thread comprises runout threads having a radial height that decreases from a nominal value to a zero value.

Claim 33 (New): A method according to claim 27, wherein the peripheral surface of the first housing comprises a substantially cylindrical surface adjacent to its shoulder with a diameter that is substantially equal to that of a substantially cylindrical outer surface of the body.

Claim 34 (New): A method according to claim 27, wherein the peripheral surface of the first housing comprises a flared surface adjacent to the free end of the female element.

Claim 35 (New): A method according to claim 27, wherein the male element has an axial abutment surface close to its free end, which surface is configured to cooperate with an axial abutment surface of the female element to limit makeup.

Claim 36 (New): A method according to claim 27, wherein the thinned zone is defined by an annular groove formed in the radial inner surface of the sealing ring and is configured to receive the annular rib of the male element to maintain the sealing ring in position after placing the sealing ring on the male element.

Claim 37 (New): A method according to claim 36, wherein prior to assembly, the radially inner face of the sealing ring has a substantially constant diameter with exception of the annular groove.

Claim 38 (New): A method according to claim 37, wherein the annular rib is defined by two annular grooves with bottom surfaces that are machined to be substantially cylindrical and of a same diameter to cooperate with the radially inner face.

Claim 39 (New): A method according to claim 38, wherein the annular groove defining the annular rib that is opposite to the free end of the male element has a flank opposite to the rib that is inclined with respect to the axis of the connection which at the end of makeup comes into contact with the radially inner surface of the sealing ring to reinforce compression of the sealing ring and the seal of the connection.

Claim 40 (New): A method according to claim 27, wherein the body is solid and is connected to a head with a radial thickness that is greater than that of the body, extending axially from the body opposite to the retaining lip and having a recess disposed between its radially outer and inner surfaces.

Claim 41 (New): A method according to claim 40, wherein the radial compression of the sealing ring includes radial compression of the head and its recess.

Claim 42 (New): A method according to claim 41, wherein the recess is in a form of an annular groove radially separating the head into two portions respectively adjacent to the radially outer and radially inner surfaces.

Claim 43 (New): A method according to claim 42, wherein the portion of the head adjacent to the radially outer surface bears on the substantially cylindrical surface of the first housing when makeup is complete.

Claim 44 (New): A method according to claim 42, wherein the annular groove has a V shaped profile.

Claim 45 (New): A method according to claim 40, wherein the outer surface of the head flares from a substantially cylindrical surface of the body to the free end of the head.

Claim 46 (New): A method according to claim 27, wherein the first and second housings of the female element together define an annular projection with a minimum diameter that is substantially equal to a maximum outer diameter of the retaining lip to overlap the retaining lip during makeup.

Claim 47 (New): A method according to claim 46, wherein when compression of the sealing ring commences, the annular projection is disposed beyond the annular rib on the male element on the free end side of the male element.

Claim 48 (New): A method according to claim 46, wherein the annular projection is disposed in alignment with the annular rib of the male element when the two shoulders come into mutual abutment.

Claim 49 (New): A method according to claim 27, wherein the second annular housing of the female element is in a form of a groove in one flank of which the female thread opens.

Claim 50 (New): A deformable sealing ring for use in the method according to claim 27, comprising a body and a retaining lip with a radial thickness that is less than that of the body, extending axially from a shoulder defining the body and having a thinned zone in the vicinity of the body which is defined by an annular groove formed in the radial inner surface of the sealing ring.

Claim 51 (New): A set for use in the method according to claim 27, comprising:

    a deformable, sealing ring comprising a body and a retaining lip with a radial thickness that is less than that of the body, extending axially from a shoulder defining the body and having a thinned zone in the vicinity of the body;

    a male tubular element comprising a tapered male thread and a radially projecting annular rib beyond the thread with respect to its free end; and

    a female tubular element comprising a tapered female thread configured to cooperate with the male thread, a first annular housing provided in the female element in a form of an enlargement of its axial boring, extending axially from its free end to a shoulder and having a peripheral surface adjacent to the shoulder, and a second annular housing disposed at an axial distance from the first housing.

Claim 52 (New): A threaded tubular connection obtained by the method of claim 27, comprising:

    a male tubular element comprising a tapered male thread;

    a female tubular element comprising a tapered female thread configured to cooperate with the male thread; and

    a deformable sealing ring interposed between the male and female elements to oppose fluid communication between the outside of the threaded tubular connection and the zone of cooperation of the threads, the sealing ring being positioned axially between the threads and the free end of the female element and comprising a body and a retaining lip with a radial thickness that is less than that of the body, extending axially towards said threads from a shoulder defining the body and having a thinned zone in a vicinity of the body, the body being housed in a first annular housing provided in the female element in a form of an

enlargement of its axial boring, extending axially from its free end to a shoulder and having a peripheral surface adjacent to the shoulder, which is in contact with the sealing ring for radial compression thereof, a radially projecting annular rib provided on the male element being in contact with the retaining lip beyond the thinned zone to cause the retaining lip to penetrate into a second annular housing formed in the female element at an axial distance from the first housing to ensure axial retention of the sealing ring by the female element.